

**REMARKS**

Claims 1-7, 10-13, 16-28, 30-42, 44-50 and 53-57 are pending in the application.

Claims 1-5 and 7 stand rejected under 35 U.S.C. §103 as being unpatentable over Kilgore et al (US Patent No. 6,200,412) in view of Keller et al (US Patent No. 5,644,153). Claim 6 stands rejected under 35 U.S.C. §103 as being unpatentable over Kilgore in view of Keller and further in view of Williams et al (US Patent No. 5,647,953). Claims 10-13 and 16-20 stand rejected under 35 U.S.C. §103 as being unpatentable over Cui et al (US Patent No. 5,965,463) in view of Yanagida (US Patent No. 5,445,712). Claims 21-26, 28 and 30 stand rejected under 35 U.S.C. §103 as being unpatentable over Kilgore in view of Keller and further in view of Saito et al (US Patent No. 5,681,424). Claim 27 stands rejected under 35 U.S.C. §103 as being unpatentable over Kilgore in view of Keller and Saito and further in view of Williams. Claims 31-35 stand rejected under 35 U.S.C. §103 as being unpatentable over Kilgore in view of Keller and Saito and further in view of Yanagida. Claims 36-42, 44-50 and 53 stand rejected under 35 U.S.C. §103 as being unpatentable over Cui in view of Kilgore and further in view of Saito. Claims 54-57 stand rejected under 35 U.S.C. §103 as being unpatentable over Cui in view of Yanagida and further in view of Saito.

Regarding the rejection against claim 1, the combination of Kilgore (primary reference) and Keller is an improper combination, and therefore, the obviousness

rejection against claim 1 fails and should be withdrawn.

Claim 1 recites etching a semiconductor wafer with a plasma etching material, and the material forming a polymer comprising carbon and a halogen over at least some internal surfaces of a plasma etch chamber. The Examiner correctly states Kilgore does not teach forming a polymer comprising carbon and a halogen over the internal surface of a plasma chamber (pg. 3 of paper 6). The Examiner attempts to address the deficiency of the teaching of Kilgore by relying on the teaching of Keller and basing the combination on a rationale stated as:

Since both Kilgore and Keller are concerned with plasma etching method (sic) using fluorocarbon gases to form residual deposit in the chamber, one skilled in the art would have found it obvious that Kilgore (sic) etching step using fluorocarbon gas would have resulted in forming a polymeric residual deposit comprising carbon and a halogen in view of Keller teaching especially since Keller states that the polymer will typically be comprises (sic) of carbon and fluorine.

(pg. 3 of paper 6). That is, the Examiner's alleged motivational rationale for combining the art is that both Kilgore and Keller are **concerned** with plasma etching methods using fluorocarbon gases to form residual deposit in the chamber. Such a rationale is simply stating that the art is analogous, and apparently it is the opinion of the Office that allegedly analogous art is appropriately combinable **without** providing any motivation rationale for the combination. The Examiner is respectfully reminded that the mere fact that references can be combined or modified does not render the resultant

combination obvious unless the prior art also suggests the desirability of the combination. MPEP §2143.01 (8<sup>th</sup> Edition), *citing In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggesting, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. MPEP §2143.01 (8<sup>th</sup> Edition), *citing In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). "In determining the propriety of the patent office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art **having the reference before him** to make the proposed substitution, combination, or other modification." MPEP §2143.01 (8<sup>th</sup> Edition), *citing In re Litner*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972) (emphasis added). Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so". 916 F.2d at 682, 16 USPQ2d at 1432; MPEP §2143.01 (8<sup>th</sup> Edition); See also *In re Finch*, 972 F.2d, 1260, 23 USPQ2d, 1780 (Fed. Cir. 1992).

The above authority clearly demonstrates that a **motivational** rationale to modify or combine references to teach the claimed invention of an applicant is

imperative for a proper obviousness rejection. "Preferably the Examiner's explanation should be such that it provides that impetus necessary to cause one skilled in the art to combine the teachings of the references to make the proposed modification." *Ex Parte Levengood*, 28 USPQ2d, 1300, 1301, Footnote 2, (Bd. Pat. App. and Inter. 1993) (citations omitted).

One of ordinary skill in the relevant art **having the Kilgore and Keller references before him** would not make the proposed combination, and therefore, the impetus necessary to cause one skilled in the art to combine the teachings of the references does not exist. Kilgore teaches redesigning components, specifically gas injection ports or tubes, of a chemical vapor deposition (CVD) system (Abstract; Background) to effectively clean the gas injection ports (col. 1, lns. 50-60). Keller teaches a plasma etching chemistry for selectively etching nitride layers relative oxide formed over a wafer (Abstract; Background). There is no fair or reasonable rationale presented why one skilled in the art with the teachings and concerns disclosed by Kilgore would be motivated to refer to Keller for any meaningful teachings. There is absolutely no impetus or motivation for a person skilled in the art and familiar with the teachings of Kilgore and Keller to make the proposed combination. The Examiner is simply stating a conclusion that both have the same **concern**, and therefore, it would be obvious to combine the two references. Such a statement and other evidence of record are completely devoid of a motivational rationale for the combination. The mere fact that the references can be combined or modified does not render the resultant

combination obvious unless the prior art also suggests the desirability of the combination. MPEP §2143.01 (8<sup>th</sup> Edition). Since the Examiner has failed to provide a proper motivational rationale for the combination of Kilgore and Keller as required by the above authority, the obviousness rejection based on the combination fails and should be withdrawn. For at least this reason, claim 1 is allowable and Applicant respectfully requests allowance of claim 1 in the next office action.

Moreover, a review of the references demonstrates that neither reference can reasonably be argued to be **concerned** with plasma etching methods using fluorocarbon gases to form residual deposits in the chamber. Kilgore teaches a hydrogen or a hydrogen-oxygen mixture may be used to remove fluorine-bearing residues from the surfaces of a reaction chamber (col. 2, Ins. 43-49) and devotes only three paragraphs (col. 6, lines 18-48) of 10 columns to the subject. Keller devotes one paragraph of 12 columns to state in passing that a final etch of a two step process for selectively etching a nitride layer (col. 7, Ins. 47-57) will remove polymer of carbon and fluorine from a reaction chamber (col. 2, Ins. 16-20; and col. 6, Ins 29-32). In no fair or reasonable interpretation can such sparse teachings be characterized as a concern for plasma etching methods using fluorocarbon gases to form residual deposit in the chamber. The tenuous connection between the references does not establish the motivational rationale required for a proper combination of art. For this additional reason, the obviousness rejection fails and claim 1 is allowable.

Furthermore, Kilgore already teaches that the hydrogen or a hydrogen-oxygen mixture works to remove fluorine-bearing residues from the surfaces of a reaction chamber. Therefore, there is no impetus for one skilled in the art with the understanding of the Kilgore teachings to look to other teachings to improve or correct an invention that already discloses the same teachings to be combined. For this additional reason, the obviousness rejection fails and claim 1 is allowable. For all the above reasons, Applicant respectfully requests allowance of claim 1 in the next office action.

Claims 2-7 depend from independent claim 1, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are neither shown or taught by the art of record.

Regarding the rejection against claim 10 based on the combination of Cui and Yanagida, claim 10 recites after forming a polymer, plasma etching at subatmospheric pressure using a gas effective to etch polymer from the chamber internal surfaces. Neither asserted reference teaches plasma etching at subatmospheric pressure using a gas effective to etch polymer from chamber internal surfaces, and notably, the Examiner does not refer to such limitation when citing to teachings in Cui and Yanagida (para. 5 at pgs. 4-5 of paper no. 6). Cui addresses etching polymers from a chamber at column 10, lines 23-35 without referring to any processing pressure. Yanagida is completely devoid of any teaching to etching polymer from chamber walls, much less plasma etching

at subatmospheric pressure using a gas effective to etch polymer from the chamber internal surfaces as recited in claim 10. Yanagida refers to teachings of a chemistry for processing a semiconductor wafer within the chamber which reduces the amount of carbonaceous polymer formed on the chamber (Col. 6, lines 44-68 and col. 7, lines 1-2). However, the reference is devoid any teaching to plasma etching polymer on the internal surfaces of the reactor chamber, and therefore, Yanagida is devoid of teaching or suggesting such a plasma etch at subatmospheric pressure. Accordingly, since neither reference provides teachings to a subatmospheric pressure, no reasonable or fair interpretation may be made that the combination of art teaches or suggests plasma etching at subatmospheric pressure using a gas effective to etch polymer from the chamber internal surfaces as recited n claim 10. Therefore, the combination of art fails to teach or suggest a positively recited limitation of claim 10, and therefore, for at least this reason, the obviousness rejection fails. Claim 10 is allowable.

Moreover, the Examiner's alleged motivational rationale for combining Cui and Yanagida is stated as both Cui and Yanagida are **concerned** with method (sic) plasma etching using carbon compound gas, and then states it would be obvious to modify Cui by the teachings of Yanagida to allegedly teach the limitations recited in claim 10 (pg. 5 of paper no. 6). Once again, the Examiner is simply stating that since both allegedly have the same **concern**, it would be obvious to combine the two references. Such a statement is completely devoid

of a motivational rationale for the combination, and therefore, is lacking the requisite motivational rationale contrary to the above stated authority. Once again, respectfully, the Examiner is simply stating that the references can be combined without proper motivation. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination MPEP §2143.01 (8<sup>th</sup> Edition). Such a tenuous connection between the references does not establish the motivational rationale required for a proper combination of art. The impetus necessary to cause one skilled in the art to combine the teachings of the references to make the proposed modification of Cui by Yanagida is lacking and the §103 rejection is improper without proper motivation. For this and all the above reasons, the obviousness rejection against claim 10 is improper and should be withdrawn. Applicant respectfully requests allowance of claim 10 in the next office action.

Claims 11-12 and 16-20 depend from independent claim 10, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.

Regarding the rejection against claim 21 based on the combination of Kilgore and Keller in view of Saito, the Examiner presents the same rationale for combining Kilgore and Keller as presented against claim 1 (Page 7 of Paper No. 6). Accordingly, for the reasons discussed above with respect to independent



claim 1, the combination of Kilgore and Keller is an improper combination for an obviousness rejection against claim 21. The rejection fails and should be withdrawn. Applicant respectfully requests allowance of claim 21 in the next office action.

Claims 22-28 and 30-35 depend from independent claim 21, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are neither shown or taught by the art of record.

For example, claim 22 is rejected over the combination of Kilgore and Keller in view of Saito. Claim 22 recites a receiver is biased during a first plasma etching and provided at ground or floating potential during a second plasma etching. The Examiner states one skilled in the art would have found it obvious to provide power at floating potential or ground potential to the Kilgore wafer receiver in view of the Saito teaching to enhance cooling efficiency during etching, referring to col. 3, lines 3-9 of Saito (Page 8 of Paper No. 6). However, Saito is devoid of any teaching to a floating potential or a ground potential and the teaching at col. 3, lines 3-9 states, "further, by means of electrostatic attraction power supply 22 connected to the electrode 21, electrostatic attraction is induced between the wafer 20 and the electrode 21 to improve adhesion between the wafer 20 and the electrode 21 and enhance cooling efficiency." In no fair or reasonable interpretation does Saito teach or suggest a receiver is biased during a first plasma etching and provided at ground

or floating potential during a second plasma etching as recited in claim 22. Accordingly, in no fair or reasonable interpretation does the combination of art provide teachings or suggestions that a receiver is biased during a first plasma etching and provided at ground or floating potential during a second plasma etching as recited in claim 22. The recited combination of art fails to teach a positively recited limitation of claim 22, and therefore, the obviousness rejection fails and claim 22 is allowable. Applicant respectfully requests the allowance of claim 22 in the next office action.

Additionally, claim 30 is rejected over the combination of Kilgore and Keller in view of Saito. Claim 30 recites first and second plasma etchings are conducted at subatmospheric pressure, and the wafer remaining *in situ* on the receiver intermediate the first and second etchings, and maintaining the chamber at a subatmospheric pressure at all time intermediate the first and second plasma etchings. The Examiner suggests that such limitations of claim 30 are taught by Kilgore at col. 5, lines 23-24 and col. 6, lines 1-3 (Page 8 of Paper No. 6). Such reference in Kilgore teaches subatmospheric pressure for a deposition or sputter etching process. But nothing is stated regarding such a pressure with respect to a plasma etching. One skilled in the art understands that sputter etching is a physical process while plasma etching is a chemical process. Accordingly, in no fair or reasonable interpretation does Kilgore teach or suggest first and second plasma etchings are conducted at subatmospheric pressure, and the wafer remaining *in situ* on the receiver intermediate the first

and second etching, and maintaining the chamber at a subatmospheric pressure at all times intermediate the first and second plasma etchings as recited in claim 30. The combination of art fails to teach a positively recited limitation of claim 30, and therefore, the obviousness rejection fails for at least this reason. Claim 30 is allowable.

Moreover, Kilgore does not teach or suggest additional limitations in claim 30, for example, the subatmospheric pressure is **maintained** at all times **intermediate** the first and second plasma etching. Consequently, in no fair or reasonable interpretation does the combination of art teach or suggest first and second plasma etchings are conducted at subatmospheric pressure, and the wafer remaining *in situ* on the receiver intermediate the first and second etching, and maintaining the chamber at a subatmospheric pressure at all times intermediate the first and second plasma etchings as recited in claim 30. The combination of art relied on by the Examiner fails to teach or suggest positively recited limitations of claim 30, and therefore, the obviousness rejection fails for this additional reason. Applicant respectfully requests allowance of claim 30 in the next office action.

Regarding the rejection against claim 36 based on the combination of Cui and Kilgore in view of Saito, claim 36 recites a second plasma etching at subatmospheric pressure using a gas having one or more components effective to etch photoresist from the substrate and polymer from chamber internal surfaces. The Examiner relies on Cui to allegedly teach the limitation of

providing a second plasma etching to etch photoresist from the substrate and polymer from the chamber internal surfaces (Page 10-11 of Paper No. 6), and refers to col. 5, lines 60-61 and col. 10, lines 24-25. Such teaching of Cui does not suggest or teach etching a polymer from a chamber as recited in claim 36. In fact, the only reference in Cui to etching a polymer from a chamber is stated as:

A post-etch plasma treatment (PET) with an oxygen plasma is often performed up to the etching to remove any residual polymers and the like, it has been found that the inclusion of silane requires a significantly longer O<sub>2</sub> PET to maintain the chamber cleanliness than does a non-saline process, such as using C<sub>4</sub>F<sub>8</sub>.

The oxygen post-etch treatment is preferably performed for a relatively long time, for example, 45 to 90s, compared to the etch time with a relatively low bias power of, for example, 150W of RF power. A longer cleaning provides a cleaner chamber which provides a more reproducible process.

(Col. 10, lines 23-35). That is, the process for cleaning the chamber as taught by Cui is performed as a **post**-etch plasma treatment, **PET**, which is after the processing of a wafer. Accordingly, in no fair or reasonable interpretation does Cui, or any combination thereof, teach or suggest a second plasma etching using a gas having one or more components effective to etch photoresist from the substrate and polymer from the chamber internal surfaces as recited in claim 36. The combination of art fails to teach a positively recited limitation of claim 36, and therefore, claim 36 is allowable.

Moreover, the motivation and rationale for combining Cui (as the primary

reference) and Kilgore is improper, and therefore the obviousness rejection fails for this additional reason. The Examiner provides the alleged motivational rationale as both Cui and Kilgore are **concerned** with the method of cleaning residual/polymer from the chamber surface, and then leads into how to modify the Cui invention with the teachings of Kilgore (Page 11 of Paper No. 6). Once again, the Examiner is simply stating that since both allegedly have the same **concern**, it would be obvious to combine the two references. Such a statement is completely devoid of a motivational rationale for the combination and is contrary to the above authority that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination MPEP §2143.01 (8<sup>th</sup> Edition).

Additionally, a review of the references demonstrates that neither reference can reasonably be argued to be **concerned** with the method of cleaning residual/polymer from the chamber surface. Cui teaches a post-etch plasma treatment (PET) with oxygen plasma to remove polymers and devotes only one and a half paragraphs of 14 columns to the subject (col. 10, Ins. 22-35). Kilgore teaches a hydrogen or a hydrogen-oxygen mixture may be used to remove fluorine-bearing residues from the surfaces of a reaction chamber (col. 2, Ins. 43-49) and devotes only three paragraphs (col. 6, lines 18-48) of 10 columns to the subject. Such a tenuous connection between the references does not establish the motivational rationale required for a proper combination of art. Why would

one skilled in the art with the understanding of the teachings in Cui which teaches chemistry for selectively etching oxide relative to a silicon wafer be concerned with or have the impetus to look at the teachings of Kilgore which is concerned with redesigning a chemical vapor deposition system. The answer is, there is no impetus. There is simply no motivational rationale for combining the two references. For this additional reason, the obviousness rejection fails and claim 36 is allowable. Applicant respectfully requests allowance of claim 36 in the next office action. Claim 36 is allowable for all the above reasons.

Claim 37-42 and 44-46 depend from independent claim 36, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are neither taught or shown by the art of record.

For example, claim 44 recites wherein the first and second plasma etchings are conducted as subatmospheric pressure and the wafer remaining *in situ* on the receiver intermediate the first and second etchings, and maintaining the chamber at a subatmospheric pressure at all time intermediate the first and second plasma etching (independent claim 36, from which claim 44 depends, recites the second plasma etching at subatmospheric pressure using a gas having one or more components effective to etch photoresist from the substrate and polymer from chamber internal surfaces). The Examiner states that Cui discloses performing the etching and cleaning step (referring to cleaning the chamber) in the same chamber while maintaining the chamber pressure at 35-45

mTorr and refers to col. 6, lines 33-35 and col. 10, lines 25-33 of Cui. However, the teachings to 35-45 mTorr has absolutely nothing to do with etching the polymer from chamber internal surfaces. As stated previously, Cui teaches removing polymer from a chamber at col. 10, lines 25-35 and no processing pressure is presented during the removing of polymer from the chamber. Accordingly, in no fair or reasonable interpretation does Cui, or the combination of art, teach or suggest recited limitations of claim 44, and therefore, the obviousness rejection against claim 44 is improper and should be withdrawn. Applicant respectfully requests allowance of claim 44 in the next office action. ✓

Regarding the rejection against claims 45 and 46, claim 45 recites wherein the gettering comprises forming a gaseous  $\text{COA}_x$  compound, where A is the etched halogen; and claim 46 recites wherein the gas comprises a carbon compound effective for the gettering. The Examiner alleges such limitations are taught by Cui at cols. 9, lines 24-25 (Page 12 of Paper No. 6). However, such teachings of Cui refer only to processing a wafer and have nothing to do with a second plasma etching using a gas having one or more components to etch photoresist from the substrate and polymer from the chamber internal surfaces as recited in claim 36, from which claims 45 and 46 depend. That is, no carbon compound is taught by Cui to etch the polymer on a chamber reactor. Accordingly, in no fair or reasonable interpretation does Cui, or any combination of art therewith, teach or suggest the limitations recited in claims 45 and 46. Claims 45 and 46 are allowable and Applicant respectfully requests allowance of

claims 45 and 46 in the next office action.

Claim 47 stands rejected on the combination of Cui and Kilgore in view of Saito, which is the same combination of art presented to reject claim 36. Claim 47 recites a second plasma etching at subatmospheric pressure using a gas comprising an oxygen component and a hydrogen component effective to etch photoresist from the substrate and polymer from chamber internal surfaces (claim 36 reciting to components without reciting an oxygen component and a hydrogen component). Accordingly, for all the reasons presented above with respect to the allowance of claim 36, claim 47 is allowable. Applicant respectfully requests allowance of claim 47 in the next office action.

Moreover, claim 47 recites after the first plasma etching and with the wafer on the electrostatic chuck, providing the electrostatic chuck at ground or floating potential while second plasma etching. The Examiner again relies on Cui to allegedly teach the pedestal/electrostatic chuck at biasing power (floating potential) and refers to col. 10, lines 30-33 of Cui (Page 10 of Paper 6). However, referring to this teaching of Cui, such states, "a relative low bias power of, for example, 150W of RF power". Such is a teaching to a **power constant** of 150 watts, and is not a teaching of ground or floating potential. In no fair or reasonable interpretation does Cui, or any combination therewith, teach or suggest after the first plasma etching and with the wafer on the electrostatic chuck, providing the electrostatic chuck at ground or floating potential while second plasma etching as recited in claim 47. Therefore, the combination of art



presented by the Examiner fails to teach or suggest a positively recited limitation of claim 47. Claim 47 is allowable for at least this additional reason. Applicant respectfully requests allowance of claim 47 in the next office action.

Claims 48-50 and 53 depend from independent claim 47, and therefore, are allowable for the reasons discussed above with respect to the independent claim as well as for their own recited features which are neither shown or taught by the art of record.

Regarding claim 54 which is rejected based on the combination of Cui and Yanagida in view of Saito, the Examiner presents the same alleged motivational rationale for the combination of Cui and Yanagida as is presented for the obviousness rejection against claim 10. Moreover, claim 54 recites after the first plasma etching and with the wafer on the electrostatic chuck, providing the electrostatic chuck at ground or floating potential while second plasma etching at subatmospheric pressure using a gas comprising an oxygen component and a carbon component effective to etch photoresist from the substrate and polymer from chamber internal surfaces (underlined portions similar to limitation discussed regarding claim 10). Accordingly, for all the reasons presented above with respect to the allowance of claim 10, claim 54 is allowable. Applicant respectfully requests allowance of claim 54 in the next office action.

Moreover, the combination of art fails to teach or suggest providing the electrostatic chuck at ground or floating potential as recited in claim 54. In fact, the Examiner fails to identify any teaching of such limitation in his rejection of

claim 54 presented in paragraph 10, page 12-14 of paper no. 6. Since the combination of art fails to teach or suggest a positively recited limitation of claim 54, claim 54 is allowable for this additional reason. For all the above presented reasons, Applicant respectfully requests allowance of claim 54 in the next office action.

Claims 55-57 depend from independent claim 54, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.


If the Examiner maintains the obviousness rejections, Applicant respectfully requests identification of additional prior art or specific teachings within the existing art in a non-final office action which discloses the alleged teachings suggested by the Examiner, or the submission of an affidavit to support the Examiner's rejection, pursuant to MPEP §2144.03 (8<sup>th</sup> Edition) and 37 C.F.R. §1.104(d)(2). "Assertions of technical facts in areas of esoteric technology must always be supported by citation of some reference" and "allegations concerning specific 'knowledge' of the prior art, which might be particular to a particular art should also be supported." *In re Ahlert*, 424 F.2d 1088, 165 USPQ 418, 420-421 (CCPA 1970) (emphasis added). 37 C.F.R. §1.104(d)(2) states "when a rejection in an application is based on facts within the personal knowledge of an employee of the office, the rejection must be supported by an affidavit when called for by the applicant." Based on this authority, identification of additional

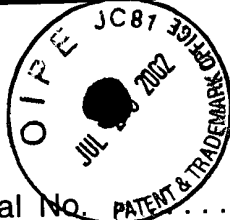
prior art or specific teachings within the existing art, or an affidavit, is requested and appropriate.

This application is now believed to be in immediate condition for allowance, and action to that end is respectfully requested. If the Examiner's next anticipated action is to be anything other than a Notice of Allowance, the undersigned respectfully requests a telephone interview prior to issuance of any such subsequent action.

Respectfully submitted,

Dated: 7-25-02

By:   
D. Brent Kenady  
Reg. No. 40,045



RECEIVED

Application Serial No. 09/677,478  
Filing Date JUL 31 2002 October 2, 2000  
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Examiner Lan Vinh  
Attorney's Docket No. MI22-1544  
Title: Plasma Etching Methods

VERSION WITH MARKINGS TO SHOW CHANGES MADE ACCOMPANYING  
RESPONSE TO MARCH 29, 2002 OFFICE ACTION

**In the Specification**

The replacement specification paragraphs incorporate the following amendments. Underlines indicate insertions and ~~strikeouts~~ indicate deletions.

At page 1, before the "Technical Field" section, please replace the existing Related Applications section with the following:

**RELATED PATENT DATA**

This patent is a continuation application of U.S. Patent Application Serial No. 09/141,775, which was filed on August 27, 1998, entitled "Plasma Etching Methods", naming Guy T. Blalock, David S. Becker and Kevin G. Donohoe as inventors, and which is now U.S. Patent No. 6,277,759, the disclosure of which is incorporated by reference.--

**In the Claims**

The claims have been amended as follows. Underlines indicate insertions and ~~strikeouts~~ indicate deletions.

There are no amendments to the claims.

**-END OF DOCUMENT-**